

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

Application of the Milwaukee Water Works
for Authority to Increase Water Rates

Docket 3720-WR-108

**SURREBUTTAL TESTIMONY OF PEIFFER BRANDT
ON BEHALF OF MILWAUKEE WATER WORKS**

1 **Q. Please state your name and business address.**

2 A. My name is Peiffer Brandt. My business address is 1031 S. Caldwell Street, Suite 100,
3 Charlotte, NC 28203.

4 **Q. Have you previously submitted direct and rebuttal testimony in this proceeding?**

5 A. Yes.

6 **Q. Have you read the direct and rebuttal testimony for this proceeding?**

7 A. Yes.

8 **Q. What is the purpose of your surrebuttal testimony in this proceeding?**

9 A. After extensively reviewing the direct and rebuttal testimony, it is evident that there are
10 five issues that have been raised by the intervenors and PSC staff: 1) customer demand
11 ratios; 2) rate of return differential; 3) capital structure; 4) transmission and distribution
12 allocation; and 5) public fire protection. The purpose of my surrebuttal testimony is to
13 respond to the arguments around these issues. My surrebuttal testimony will close with a
14 general observation.

15 **CUSTOMER DEMAND STUDY**

16 **Q. Have you reviewed the Customer Demand Study prepared by Trilogy?**

17 A. Yes.

1 **Q. Are you aware of the concerns raised by the intervenors and PSC staff?**

2 A. Yes. Mr. Behm, Mr. Planton, Mr. Rothstein, and Mr. Kaempfer, who represent the
3 wholesale communities do not believe the study was robust enough to justify changing
4 the demand ratios from the 2009-2011 Rate Case. They question various aspects of the
5 study, particularly the timing of the data collection efforts, the number of customers
6 included in the analysis, and the validity of some of the assumptions. Ms. Schmidt, a PSC
7 staff member, raises the concern that the study is not robust enough to justify
8 modifications to the demand factors. Finally, Mr. Hanser recommends the use of future
9 peaking factors.

10 **Q. Do you believe the analysis is sufficient to justify modifying the demand ratios from**
11 **those used in the 2009-2011 Rate Case?**

12 A. Yes. The demand ratios included in the 2009-2011 rate case are partially based on a
13 study done in 1977. The data for these analyses is less reliable than the current analysis
14 presented in the Customer Demand Study. In fact, not modifying the demand ratios
15 would be more inaccurate as it relies on older data that was developed using similar
16 assumptions. For example, the wholesale customers max hour demand in the 2009-2011
17 Rate Case is simply the max day demand times 1.43. The Customer Demand Study
18 clearly shows that none of the wholesale customers have a max hour of exactly 1.43
19 times max day demand. Therefore, the wholesale intervenors are making the
20 unreasonable claim that the use of a gross assumption is more appropriate than using
21 demand factors based on substantial data collected over the last two years.

22 **Q. What do you believe is the basis of Ms. Schmidt's concerns?**

1 A. I am not certain of the basis for her concerns. Ms. Schmidt had the opportunity to read
2 the direct testimony of the wholesale intervenors attacking the Customer Demand Study,
3 but had not had a chance to see the rebuttal testimony submitted by Mr. Granum and Ms.
4 Cramer. I am confident that when she reads the rebuttal testimony submitted by Mr.
5 Granum and Ms. Cramer responding to the criticism of the wholesale intervenors that she
6 will better recognize the value of the Customer Demand Study.

7 **Q. What is your opinion of Mr. Hanser's recommendation to use future peaking**
8 **factors?**

9 A. I think it is an interesting proposition in theory, but I do not believe determining future
10 peaks is practical given the current situation. He claims that the network is designed to
11 meet future peak flows. Again, in theory this makes sense, but since system design is not
12 fluid, the system cannot be easily modified to meet future peaks. The system was
13 designed many years ago based on a different set of expected future peaks, so historical
14 peak flows actually better represent its actual design than future peak flows.

15 **RATE OF RETURN DIFFERENTIAL**

16 **Q. Is it typical throughout the water industry, both in Wisconsin and nationally, for**
17 **wholesale customers to be charged a differential rate of return?**

18 A. Yes, wholesale customers located outside the city providing service are typically charged
19 a higher rate of return because the owner of the utility, the customers of the utility within
20 the city, have made an investment in the assets to provide service to the wholesale
21 customers and are taking on the risk of serving these customers.

22 **Q. What risks are MWW taking in serving the wholesale customers?**

1 A. As mentioned in my rebuttal testimony, Rebuttal-MWW-Brandt-3 to 4, there are a
2 number of risks. MWW does not hold sizeable cash balances, which is unusual for a
3 utility the size of MWW. This lack of available cash places MWW at risk of having cash
4 flow issues. MWW is experiencing declining consumption, with the test year
5 consumption down 7% for retail and 8% for wholesale customers when compared to the
6 test year usage levels from the 2010 rate case. MWW also has the risk that a wholesale
7 customer could go elsewhere for its water purchases leaving MWW with stranded costs
8 since the wholesale contracts have 10 year terms, but the investments MWW must make
9 to serve these customers have useful lives much longer than 10 years. At least one
10 wholesale customer, the Village of Shorewood, is currently evaluating an alternative
11 water provider (Rebuttal-MWW-Brandt-4). MWW has an obligation to serve each
12 customer. Finally, MWW has to cover any extraordinary operating costs, such as the
13 estimated \$5 million in additional O&M expenses associated with the harsh winter this
14 year.

15 **Q. The wholesale customers continue to point to the Kenosha case as a precedent for**
16 **eliminating the differential rate of return. Are there differences between the**
17 **Kenosha case and this case?**

18 A. Yes, there are significant differences. As mentioned in my rebuttal testimony, Rebuttal-
19 MWW-Brandt-6 to 7, the contract between the Kenosha Water Utility (KWU) and
20 Pleasant Prairie Water Utility (PPWU) is more restrictive, preventing PPWU from
21 purchasing water from any other providers and prohibiting the development of any
22 alternative sources. The MWW contracts prohibit purchasing water from other providers
23 but do not prohibit the development of alternative sources. In addition, the KWU-PPWU

1 contract term is permanent, while the Wauwatosa contract term, for example, is 10 years.
2 This difference is very important because it shows that there is more risk associated with
3 the MWW wholesale contracts.

4 **Q. What is the return the City receives from the 100 basis point differential?**

5 A. Assuming the same level of total operating revenues (\$94,863,483), the necessary rate of
6 return for all customers would be 5.38%. Applying this in the model results in the
7 wholesale customers' cost of service decreasing by \$365,062 and the retail customers'
8 cost of service increasing by the same amount. Therefore, the benefit to the retail
9 customers of the differential rate of return is \$365,062. If we apply this benefit to the
10 investment of the City identified by Mr. Behm of \$16,846,716 (Rebuttal-Wholesale
11 Customers-Behm-6), then the "annual dividend" to retail customers, as Mr. Behm terms
12 it, is 2.2%. This calculation is shown in Ex.-MWW-Brandt-10.

13 **Q. Why does the percentage you calculated vary so much from the 17.3% "annual**
14 **dividend" calculated by Mr. Behm?**

15 A. In his analysis, Mr. Behm assumes a starting point of 6.25% for both customer classes.
16 Doing so results in total operating revenues of \$97,803,095 (\$2,939,612 greater than
17 MWW has requested). He then calculates the retail "savings" of reducing the retail rate
18 of return to 5.25%. The fact of the matter is he has done an apples to oranges
19 comparison. The additional \$2.9 million is not savings to the retail customers, it is the
20 amount of additional operating revenues MWW would recover at the higher rate of
21 return, a level of operating revenues that MWW has not requested.

22 **CAPITAL STRUCTURE**

1 **Q. What are the concerns regarding the capital structure and how could it impact**
2 **MWW's rate filing?**

3 A. The intervenors have expended comparatively less effort arguing the capital structure
4 issue. However, Mr. Rothstein has raised concerns in his direct and rebuttal testimony
5 that because MWW's capital structure is heavily weighted to equity it provides too great
6 of a return to MWW. (Rebuttal-Wholesale Customers-Rothstein-2 to 3 and 5 to 6). In
7 general, the objective of his testimony is to persuade the Commission to use an approach
8 inconsistent with typical Commission practices due to the high level of equity so that
9 MWW will receive less of a return, thereby lowering the revenue requirement and
10 ultimately lowering the costs to be recovered from the wholesale customers.

11 **Q. Does the PSC guidance require a capital structure of 50% equity and 50% debt?**

12 A. No, the PSC Manual suggests that a favorable capital structure has "at least" 50 percent
13 equity and "less" than 50 percent debt. Mr. Rothstein, Rebuttal-Wholesale Customers-
14 Rothstein-6, mentions a quote from the PSC website, "The optimum capital structure is
15 generally considered to be 50 percent equity and 50 percent debt." Even though this may
16 be a benchmark for utilities to consider, each utility should evaluate its own current
17 financial position and future prospects before blindly moving to this capital structure.
18 For example, limiting a utility that is serving a growing service area to such a rule of
19 thumb could stifle growth because the utility would not be able to issue the debt
20 necessary to construct the assets to support the growth. At the same time, requiring an
21 aging utility without growth, that will likely face significant capital repair and
22 replacement costs as some of its major assets could put the utility at risk of having the
23 future debt capacity necessary to efficiently fund these future costs.

1 **Q. Does the AWWA Manual M1 require a capital structure of 50% equity and 50%**
2 **debt?**

3 A. No, as mentioned in my rebuttal testimony, Rebuttal-MWW-Brandt-10 to 11, the Manual
4 M1 suggests that if a utility's allowed rate of return is to be based on its weighted average
5 cost of capital then it may be appropriate to use a capital structure of 50 percent equity
6 and 50 percent debt to calculate the weighted average cost of capital if a utility has an
7 atypical capital structure. This is not relevant in this case since the Commission uses a
8 "capital structure neutral" approach in determining the allowable rate of return.

9 **Q. What benefits does MWW derive from having the capital structure that it has?**

10 A. Because MWW has a capital structure with a low ratio of debt to equity, it has low
11 interest payments. Due to the low interest payments, MWW will be able to utilize more
12 of the return on rate base for funding main replacements. The low debt to equity ratio
13 also provides MWW with the capacity to issue debt in the future. Given the age of the
14 system, there is likely to be major repair and replacement efforts in the future. Without
15 this capacity to issue debt, MWW could be forced to fund these efforts with rate funded
16 capital, which could result in a spike in the rates for all customers.

17 **Q. Is the \$16 million return that Mr. Rothstein references, Rebuttal-Wholesale**
18 **Customers-Rothstein-3, a function of MWW's capital structure?**

19 A. No, not directly. The return on rate base is calculated by multiplying the blended rate of
20 return, 5.38% (from 5.25% retail and 6.25% wholesale) and the Net Investment Rate
21 Base (\$336,130,621), which is \$18,068,552. Since neither the blended rate of return nor
22 the Net Investment Rate Base is a function of the MWW's capital structure then the \$16
23 million is not directly linked to MWW's capital structure. Where there is a linkage is that

1 the \$16 million figure comes once the interest on debt service is subtracted from the
2 return on rate base. Since MWW has a low debt to equity ratio, it has relatively little
3 annual interest expense, so the just over \$18 million in return on rate base is only reduced
4 to \$16 million.

5 **Q. Therefore, is the return on rate base reasonable?**

6 A. It is reasonable, and it will allow MWW to do the level of main replacement identified
7 without having to issue additional debt. The \$16 million will be reinvested into the
8 system, as mentioned in Rebuttal-PSC-Anne Waymouth-2. Responding to Rebuttal-
9 Wholesale Customers-Rothstein-5 to 6, if the return is lowered because of a hypothetical
10 return calculation based on a capital structure that Mr. Rothstein believes is appropriate,
11 then MWW would have to issue debt to do the level of mains replacement proposed by
12 MWW based on recommendations from PSC staff. Doing so would increase annual
13 interest costs in the future, reducing the amount of return on rate base MWW could
14 reinvest in the system.

15 **TRANSMISSION AND DISTRIBUTION ALLOCATION**

16 **Q. What is the issue regarding the transmission and distribution lines?**

17 A. There are two ways to allocate the water main assets between transmission and
18 distribution lines: 1) based on actual costs of installation of the line; and 2) based on
19 length times diameter (inch-feet).

20 **Q. How does using one approach versus the other impact the rate case?**

21 A. The two methodologies provide different allocations of mains between distribution and
22 transmission. The actual cost approach allocates 71% of the water main assets to
23 distribution mains and 29% of the assets to transmission mains, while the inch-feet

1 approach allocates 60% of the water main assets to distribution mains and 40% of the
2 assets to transmission mains. As a result, these percentages determine how much
3 depreciation and return on rate base are allocated to transmission and distribution.

4 Wholesale customers are not allocated any of the distribution costs, so the percentage has
5 a material impact on the rates that are calculated for each customer class.

6 **Q. What are the positions of the various parties regarding this issue?**

7 A. Mr. Planton and Mr. Rothstein, on behalf of the wholesale intervenors, have argued for
8 utilizing the original cost approach in their direct and rebuttal testimony (Rebuttal-
9 Wholesale Customers-Planton-4 and Rebuttal-Wholesale Customers-Rothstein-9 to 10).
10 Mr. Hanser, on behalf of MillerCoors, supported utilizing the inch-feet approach in his
11 rebuttal testimony (Rebuttal-MillerCoors-Hanser-8). MWW, through Direct-MWW-
12 Wright-5 to 6 and Rebuttal-MWW-Wright-11 to 13, also supports utilizing the inch-feet
13 approach.

14 **Q. Why do you believe the inch-feet approach is more appropriate?**

15 A. As discussed in the rebuttal testimony of Mr. Hanser and Mr. Wright, the cost approach is
16 skewed because the cost of mains changes over time. The example provided by Mr.
17 Hanser does an excellent job of conveying this point (Rebuttal-MillerCoors-Hanser-8).
18 Also, the oldest mains, which is where the costs are going to be incurred in the near
19 future, contribute the least to the allocation, so there is a disconnect between the
20 allocations and the costs incurred for maintenance, repair, and replacement. The inch-
21 feet approach eliminates these issues.

22 **PUBLIC FIRE PROTECTION**

23 **Q. What are the issues that have been raised around public fire protection?**

1 A. There are two issues that have been raised around public fire protection. One is the
2 allocation of public fire protection costs to wholesale customers as raised by the
3 wholesale customer witnesses and the other is the magnitude of the fire demand that
4 should be used for allocating public fire protection costs as raised by Mr. Shannon in his
5 rebuttal testimony.

6 **Q. What are the wholesale intervenors' concerns?**

7 A. The wholesale intervenors have raised concerns about the allocation of fire protection to
8 wholesale customers. Mr. Kaempfer has testified that from an operational perspective due
9 to certain improvements within their systems, the wholesale customers can meet their
10 own fire flow needs. Mr. Behm and Mr. Rothstein have testified that the wholesale
11 customers should not have any fire protection costs allocated on more general and
12 theoretical grounds.

13 **Q. Do you agree with Mr. Kaempfer's analysis of the fire protection capabilities of the**
14 **wholesale customers?**

15 A. I do not claim to be an expert so I cannot offer an opinion on the details of his analysis. I
16 can speak to it in a more general way that is relevant to the allocation of public fire
17 protection costs. On the face, his argument can be persuasive, but it does not tell the
18 whole story. When the wholesale customers take an asset out of service, they have
19 MWW providing the redundancy necessary to ensure fire protection for the wholesale
20 customer. When MWW takes an asset out of service to perform routine maintenance, it
21 does not have another utility to provide back-up service. Therefore, MWW has built a
22 system with redundancy to provide protection when portions of the system are down. By
23 having MWW as a backstop, the wholesale customers do not need to provide the level of

1 redundancy, so they are receiving some benefit from MWW even if they can meet fire
2 flow with all their assets in service and the tanks full at the beginning of a fire. In
3 addition, as Mr. Pauly points out, Rebuttal-MWW-Pauly-3 to 4, MWW would be
4 impacted by any fire event for one of the wholesale customers as such an event would
5 trigger MWW refilling the wholesale customer's storage or pressurizing the wholesale
6 customer's system.

7 **Q. Do you agree with Mr. Shannon's concern about the fire demand basis?**

8 A. As mentioned in my rebuttal testimony, I have some concerns about the population
9 method, similar to those expressed by Mr. Shannon. There is not a direct link between
10 population and the true fire demand. Also, the method results in the total demand being
11 much higher than what seems intuitively to be the case. However, given the trade-offs
12 and the difficulty with developing fire demands that are reproducible and can be
13 relatively easily updated, we believe the population-based demand approach for
14 determining public fire demand is reasonable. At the same time, MWW would not be
15 overly concerned if total demand was lowered, which would have the effect of shifting
16 costs from recovery through the public fire charge to the general services. MWW
17 remains in favor of working with the PSC to develop an approach for developing fire
18 demand that more equitably allocates public fire protection costs for all its customers.

19 **Q. Were you surprised by the opinion Mr. Shannon provided in his rebuttal regarding**
20 **allocating fire protection costs to the wholesale customers?**

21 A. Yes. Mr. Shannon indicated that he agreed for the most part with the wholesale
22 intervenors based on the argument that the communities have their own storage capacity.
23 He does not provide any more support for his opinion. I would suspect that as he reads

1 the rebuttal testimony provided by Mr. Pauly and Mr. Wright and considers this issue in
2 more detail, he may better recognize how MWW provides a benefit to the wholesale
3 customers regarding fire protection, and as a result how the wholesale customers should
4 be responsible for a share of the public fire protection costs.

5 **GENERAL OBSERVATIONS**

6 **Q. In your rebuttal testimony you expressed your opinion that MWW attempted to**
7 **develop a balanced cost of service and rate design in a transparent manner. Have**
8 **you changed your mind based on the rebuttal testimony that you have reviewed?**

9 A. Absolutely not. In fact, I believe the direct and rebuttal testimony have shown exactly
10 what I was expressing. MWW has been challenged from different intervenors on the
11 same issue with the intervenors taking different positions. As would be expected, each
12 intervenor is attempting to have its share of the revenue requirements decreased. MWW
13 wants to continue providing high quality service to all of its customers and recover the
14 costs for providing this service equitably. We believe our recommended approach
15 equitably allocates costs to all customer classes. We have attempted to lay out the
16 support for our recommended approach in a transparent, concise, and simple to
17 understand manner, including providing a model that shows all the calculations within
18 the cost of service and rate design.

19 **Q. Does this conclude your surrebuttal testimony?**

20 A. Yes, it does.